

RIO PALENQUE FERN NOTES

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Among the ferns now known from the Río Palenque Field Station due to the collecting efforts of Dr. C. Dodson and his associates, one is a new, rather wide-ranging species, and another requires transfer to the correct genus. Since the "Flora of the Río Palenque Science Center" soon will appear, the purpose of this paper is to validate the names of these species.

Dicranoglossum polypodioides (Hooker) Lellinger, comb. nov. Plate 1-A

Taenitis furcata var. *polypodioides* Hooker, Sp. Fil. 5: 188. 1864.

TYPE: ECUADOR: "Base of the Andes on the road to Guayaquil," Jameson (K not seen).

Eschatogramme polypodioides (Hooker) C. Chr. Dansk Bot. Ark. 6(3): 38. 1929.

Among the species of *Dicranoglossum*, this is the only one with discrete, usually round or rarely elongate or confluent sori.

Diplazium striastastrum Lellinger, sp. nov. Plate 1-B

Planta terrestris. Rhizoma erectum ca. 1-3 cm diam. usque ad 1 m longum, radicibus serpentinis fuscis 1-2 mm diam. suffultum; paleis linear-lanceolatis, usque ad 15 mm longis 3 mm latis leviter bicoloribus, parte centrali atrobrunneis fibrosis nitidis, marginibus stramineis subfibrosis integris vel leviter repandis. Stipites 20-50(57) cm longi 2.5-6 mm lati straminei vel brunnei sulcati, ad basin paleis eis rhizomatis similibus praeditis, juventute omnino pilosuli glabrescentes. Rachides 25-90 cm longae 0.5-4 mm latae stramineae vel bruneae sulcatae omnino pilosulae, pilibus usque ad 0.5 mm longis subcatenatis cinnamomeis. Laminae 30-100 cm longae 20-30(40) cm latae papyraceae lanceolatae pinnato-pinnatifidae, ad basin obtusae vel truncatae, ad apicem acuminatae pinnatifidae; pinnis alternis vel suboppositis linear-lanceatis uniformiter pinnatifidis apice excepto leviter crenulatis, costis sulcatis omnino leviter pilosulis, venis curvatis simplicibus parum prominulis 4-8 paribus per costulam; pinnis inferioribus usque ad 20 cm longis 3 cm latis 1/3-1/2 ad costam incisis petiolulatis (usque ad 4 mm); pinnis superioribus 5-8 cm longis 1-1.5 cm latis 1/4-1/3 ad costam incisis sessilis; apice pinnatifidis 6-10 cm longis 3-5.5 cm latis, lobis connatis et adnatis acutis vel obtusis. Sori lineares. Indusia continua ca. 0.15 mm lata membranacea integra, seriebus unicis inter costulam et marginem segmenti dispositae.

TYPE: COSTA RICA: CARTAGO: Tuis, near Turrialba, alt. 620 m, Pittier 11248 (HOLOTYPE: US; ISOTYPE: BM, MO).

DISTRIBUTION: Southern Mexico, Guatemala, Honduras, Costa Rica, Panama, Venezuela, Colombia, and Ecuador, at altitudes of 0-1400 (2200) m in Central America and 0-1200 m in South America.

PARATYPES: MEXICO: OAXACA: W from Jalapa de Díaz, 2000-3300 ft. alt., 5 Oct. 1971, Hallberg 1332 (NY, US). GUATEMALA: ALTA VERAPAZ: Finca Seamax, Senahu, Cerro Sobre, ca. 3000 ft. alt., 24 Jul 1936, Hatch & Wilson 109 (US). STA. ROSA: Volcán Tecuamburro, 6000 ft. alt., Feb 1893, Heyde & Lux (Donn.-Sm) 4676 (US). ZACAPA: Sierra de Las Minas, Volcán de Monos, along the Rillito del Volcán de Monos, 1150-2100 m alt., 10

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Jan 1942, Steyermark 42390 (F, US). **HONDURAS:** CORTÉS: Río Lindo near Carrizal, 550 m alt., 12 Apr 1951, Williams & Molina 17837 (EAP, US). **COSTA RICA:** ALAJUELA: NW of Volcán Arenal, ca. 2 km NE of Tabacón, ca. 500 m alt., 16 Aug 1970, Lellinger 1639 (US); Llanuras de S. Carlos, 200 m alt., Brade & Brade 793 (UC); near Zapote on the road to Villa Quesada, 4000-4500 ft. alt., 24-27 Mar 1955, Scamman 7681 (GH, US); Río S. Rafael, 2 km W of La Marina, 550 m alt., 17 Feb 1966, Molina, Williams, Burger & Wallenta 17307 (EAP, F, US). CARTAGO: Vicinity of Turrialba, 600 m alt., 24-26 Apr 1906, Maxon 154 (NY, US); Valley of the Río Reventazón, 3 km SE of Turrialba, 500-600 m alt., 23 June 1949, Holm & Iltis 83 (GH, MO, NY, US); road to Tuis, 650 m alt., Oct 1897, Tonduz 11340 (CR, US). HEREDIA: N slope of Cerro Chompipe, ca. 10 km NNE of Heredia, 2200 m alt., 8 July 1970, Lellinger 1022 (US); Río Puerto Viejo at its confluence with the Río Sarapiquí, Apr 1892, Bolley 6926 (BR, US), Feb 1893, Pittier 7502 (BR, US); Finca La Selva near Puerto Viejo, 125 m alt., 16 Aug 1967, Lellinger 908 (US), ca. 300 ft. alt., 18-28 Feb 1955, Scamman 7472 (GH, US), 125 m alt., 18 June 1967, de la Sota 5123 (LP, US), ca. 150 m, 30 Aug 1961, Weber 6120B (GH, US). LIMÓN: Suerre, 300 m alt., Feb 1896, Donnell-Smith 6884 (US); Los Diamantes, Rubber Plant Station, ca. 1000 ft. alt., 9-10 Apr 1953, Scamman 7140 (GH, US), ca. 200 m alt., 9 Jul 1949, Holm & Iltis 366 (GH, MO, NY, US); Jiménez, 650 ft. alt., Apr 1894, Donnell-Smith 5078 (US), 200 m alt., Mar 1902, Alfaro 162 (US). S. JOSÉ: basin of the Río El General, 675-900 m alt., Mar 1940, Skutch 4804 (US). **PANAMA:** BOCAS DEL TORO: vicinity of Nievecita, ca. 0-50 m alt., 8-19 Aug 1938, Woodson, Allen & Seibert 1801 (MO, US). CHIRIQUÍ: vicinity of El Boquete, 1380 m alt., 3 Feb-15 Mar 1938, Bro. Maurice 668 (US). COCLÉ: El Valle de Antón, 30 June 1973, Aguilar 20 (PMA, US), 29 Aug 1970, Ebinger 1118 (US), 30 June 1973, González 4 (PMA, US), 30 June 1973, Vergara 7 (PMA, US); La Mesa, 810 m alt., Croat 25309 (MO). VERAGUAS: Valley of the Río Dos Bocas above Sta. Fe, 450 m alt., Croat 27517 (MO). **VENEZUELA:** MIRANDA: Oripoto, 1200 m alt., Apr 1951, Hno. Gines 5295 (US). NUEVA ESPARTA: Isla Margarita, Juan Griego trail, 450 m alt., 29 Jul 1903, Johnston 153 (GH, US); Isla Margarita, El Valle, 16 Aug 1901, Miller & Johnston 161 (GH, US). **COLOMBIA:** CHOCÓ: Quebrada Jellita, Bahía Solano, 50-100 m alt., 22 Feb 1939, Killip & Garcia 33499 (US). EL VALLE: branch of the Río Anchicayá between Pavas and Miramar, 350-450 m alt., 15 Apr 1943, Cuatrecasas 14389 (US); Río Digua valley between La Elsa and Río Blanco, 920 m alt., 2-5 Apr 1939, Killip 34745 (US). PUTUMAYO: ca. 40 km NW of Puerto Asís, ca. 1000 ft. alt., 28-29 Jul 1965, King 6090 (US). **ECUADOR:** COTOPAXI: road between Quevedo and Quito, ca. 500 m alt., 28 Oct 1939, Haught 2919 (US). LOS RÍOS: Río Palenque Field Station, 200 m alt., 13 Feb 1974, Gentry 9907 (MO, US), 150-220 m alt., 31 Mar 1971, Dodson & McMahon 4304 (SEL, US). PICHINCHA: 20 km W of Sto. Domingo de los Colorados, 1000 ft. alt., 25 Oct 1961, Cazalet & Pennington 5153 (US); vicinity of Sto. Domingo de los Colorados, 500 m alt., 2-4 Apr 1943, Holdridge 1608 (US). MANABÍ: El Recreo, Eggers 14874 (US); Estero Don Pablo, E of Olmedo, ca. 100 m alt., Haught 3485 (US).

This species previously has been confounded with *Diplazium striatum* (L.) Presl and was identified also with *D. crenulatum* Liebm., a synonym of *D. striatum*. The confusion has occurred because entire fronds are needed for easiest separation, and in the past most collections were incomplete. The median and apical portions of the two species look quite a bit alike, but there is no mistaking the basal portions. *Diplazium striatastrum* pinnae are quite uniform in width and division from the base of the blade to near the apex, whereas the basal pinnae of *D. striatum* are wider and more dissected (fully pinnate) than the median and subapical pinnae. That *D. striatastrum* is not a juvenile phase of the larger *D. striatum* is shown by differences in range and in rhizome scales, which have rather straight walls in *D. striatastrum* but have sinuous walls in *D. striatum*.

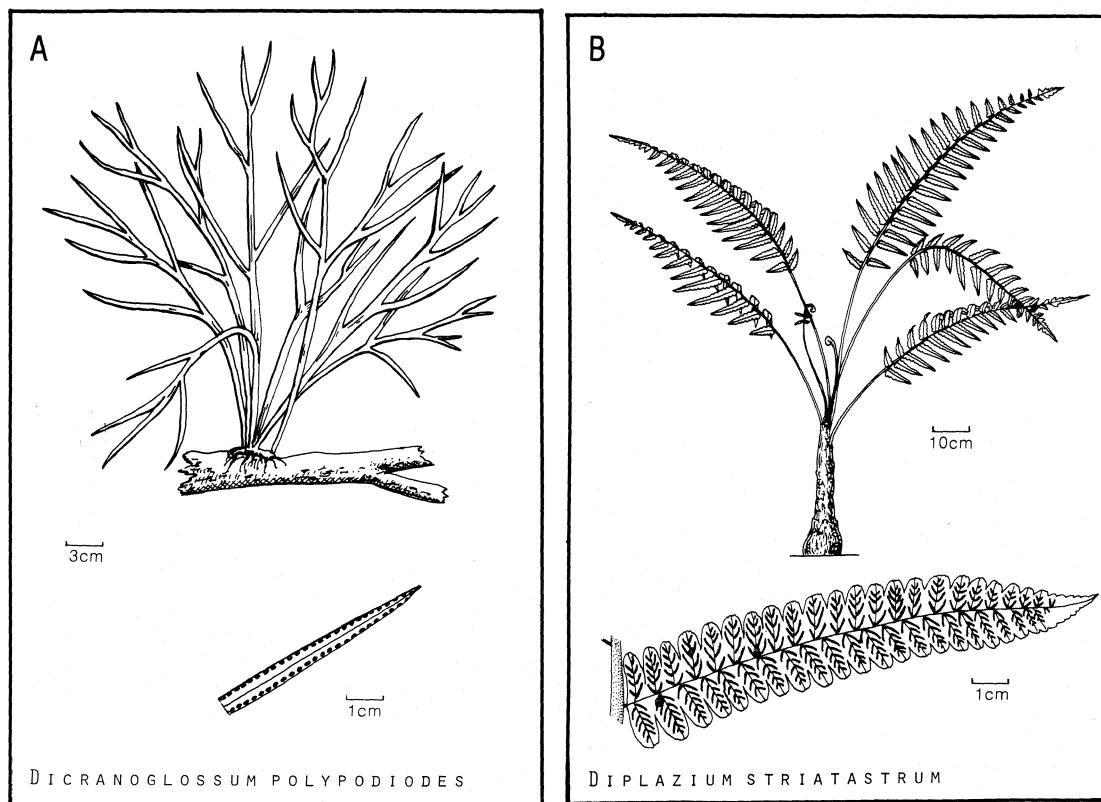


Plate 1